ABSTRACT OF THE DISCLOSURE

PERFORMANCE SIMULATION PROCESS, AND MULTIPROCESSOR APPLICATION PRODUCTION PROCESS, AND DEVICES FOR IMPLEMENTING SAID PROCESSES

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The disclosure relates to a process for simulating a multiprocessor application placed on a target architecture, characterized in that it includes at least the following steps:

(a) a step (E2) to prepare the simulation to produce a services graph (D3), using
10   firstly a tasks graph (D2) and secondly a list of mechanisms and their definition (A2);

(b) a step (E3) to execute the simulation to determine the performance of the placed application, using a behavioral model (A3) of the target architecture and the services graph (D3).

15 The disclosure also relates to a process for producing a multiprocessor application, characterized in that it includes at least the following steps:

(a) a step (E1) to place the application on the target architecture using firstly a functional description (D1) of said application, and secondly the list of resources (A1) of the target architecture in order to produce a tasks graph (D2);

20 (b) a step (E2) to prepare a simulation to produce a services graph (D3) starting firstly from a tasks graph (D2), and secondly from a list of mechanisms and their definitions (A2);

(c) a step (E3) to execute the simulation to determine the performance of the placed application, using a behavioral model (A3) of the target architecture and
25   the services graph (D3).

The invention is particularly applicable to multiprocessor applications requiring high computing power, such as systematic signal processing (SSP) for radar, image processing, and real-time data compression.